



**Patent of Invention**

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**Title of Invention:** Electronic random message storage and generation novelty device

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**Field of search:** 446/236, 446/242

**Cross-reference to related applications, US Patent Documents:**

5209692	5/93	Coleman
5324527	6/94	Coleman
5471373	11/95	Coleman
5690535	11/97	Fishman
5733033	3/98	Fishman
6077144	6/00	Fishman
5791966	8/98	Capps
2746756	5/56	"
2794298	6/57	"
3278182	10/66	"
4470044	9/84	"
4563160	4/86	"
4925424	5/90	"
5036442	7/91	"
5041947	8/91	"
5045016	9/91	"
5145444	9/92	"
5190491	9/93	"
5356328	10/94	"
5406300	4/95	"

Fishman covers candy holding devices that combine the act of presenting candy with electronic displays to enhance the presentation of candy products. Capps et.al. work on rotating candy with electronic displays, again to increase the value or experience of candy. Patents 2746756 through 5406300 are yo-yo products with displays on them that are enacted by the motion of the yo-yo. In all these cases the combination of a

consumable product with the electronics is different than our combination of electronics and a novelty product as described below.

### **Federally Sponsored Research and Development**

There is not or will not be any federal funding of the work described in this patent.

**US patent class:** 446/236

### **Background of the Invention**

This invention relates generally to the electronic novelty market. This device is generally an electronic storage device that, when turned on, extracts randomly stored information from a storage chip and displays it on a LED or electronic screen. The electronics are embodied in a housing, generally made of plastic formed into a unique shape relating to the design and function of the product. The invention is the combination of several technologies; the storage of electronic information, the random nature of the retrieval, and the unique shape of the device all combined into one product.

### **Summary of the Invention**

There are several unique aspects of this invention that are not found in the market today.

Most products that serve this function are in the form of printed cards that are chosen based on a game board type activity. So, the aspects of this invention are:

First, the electronic storage of the information on a memory chip. Second is the program used to retrieve the information off the storage chip and display it on the electronic display. Third is the randomness of the retrieval achieved by timers in the program.

Fourth is the size of the device to fit in the palm of your hand. Sixth is the encompassment of the electronics into a unique shape to match the theme of the product.

Seventh is the multi-function switch which allows the device to alert the user-to-be by flashing or other alert means.

### **Brief Description of Drawings**

Figure One is an overall view of the initial product

Figure two is the view of the rear of the circuit board.

Figure three is the view of the front of the circuit board.

### **Detailed Description of the Preferred Embodiment**

Referring to the drawings mentioned above, figure one shows the overall embodiment (2) of the invention. In this version the molded housing is in the shape of a heart made of two pieces, 3A and 3B, the front and back respectively. The front has a rectangular hole to allow viewing of the electronic display. Molded into the top of the housing are slots that allow a lanyard (1) to be threaded through to allow the device to be worn around the neck or hung for display.

Figure two shows the rear of the circuit board assembly. In addition to the basic electronics such as resistors and capacitors to make the circuit function, the board consists of the driver chip (5) that holds the program that operates the device and enables the operation to randomly select stored messages, to display them in a scrolling fashion, to flash the alert light and generally provide the operating system for the device. The message chip (6) stores the messages or information that is to be displayed. Switch (7) is a three position switch that has an off position, a flashing light position and a display message position. Finally, it shows mounting holes (8) that will allow for an additional switch that will add the capability to switch between languages on the memory chip by flipping it to a second or third position.